

Date: Thu, 12 Aug 93 04:30:14 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V93 #7
To: Ham-Digital

Ham-Digital Digest Thu, 12 Aug 93 Volume 93 : Issue 7

Today's Topics:

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 PacketCluster in Cor

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
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Problems you can't solve otherwise to brian@ucsd.edu.

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We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Wed, 11 Aug 1993 18:26:29 GMT
From: dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!
darwin.sura.net!jabba.ess.harris.com!mlb.semi.harris.com!controls.ccd.harris.com!
drs@network.ucsd.edu
Subject: ALINCO DJ160 ON PACKET ?
To: ham-digital@ucsd.edu

I HAVE AN ALINCO DJ160 HANDI-TALKIE THAT I WOULD LIKE TO PUT ON PACKET
USING THE BAYCOM MODEM. I DON'T KNOW HOW THE MICROPHONE IS SET UP ON THAT
RADIO. DOES THE AUDIO AND PTT EXIST ON THE SAME LINE? ANYBODY KNOW HOW TO
HOOK IT UP? IT WOULDN'T BE A PROBLEM IF IT CAME WITH A SCHEMATIC!!!
DOUG, N4IJ, PALM BAY, FL

Date: 12 Aug 93 05:11:47 GMT
From: vortex.com!lauren@rand-unix.arpa

Subject: BAYPAC and standard software
To: ham-digital@ucsd.edu

Greetings. With all the talk about the BAYPAC, a couple of questions come to mind:

- 1) Since it is really only a modem, I assume 1200bps is the limit?
- 2) Since it depends on its own software for all packet operations, is it possible to use "other" packages in conjunction with it? Is there a interface for higher level applications? If so, does anyone make use of it?

Thanks.

--Lauren--

Date: Wed, 11 Aug 1993 18:27:12 GMT
From: tandem!vern!pat@uunet.uu.net
Subject: Internet <--> packet gateway instructions
To: ham-digital@ucsd.edu

I have had a few email requests for instructions on how to use my gateway, so here it is. Since I am running NQARY's code, there are no big differences for those of you who have his instructions.

There are still a few problems with the phone line, which is why the phone number is not listed.

Enjoy.

-pat N6QMY :-)

N6QMY/BBS Internet Gateway Operating Instructions
April 11, 1993

LOCAL USERS:

Local users are those that log into the bbs via the bbs's telephone modem port (510-xxx-xxxx) or via one of the 4 tnc ports (145.09, 145.79, 223.62, or 441.50). Each local user has a bbs account that is used to customize how the bbs interacts with the user.

Local users can set their account up so that all incoming mail addressed to their call will be forwarded via a gateway to internet and on to

other networks (mcimail, compuserve, etc). All the user needs to do is enter his email address and turn the feature on.

```
EMAIL bob@hal.com
EMAIL ON
```

When the EMAIL feature is turned on the packet message will be deleted at the time of forwarding through the gateway. So care should be taken that the paths are correct prior to turning the feature on, for instance enable it, send a test message, and disable it. After a successful transfer re-enable the feature. To disable the auto forwarding feature simply type:

```
EMAIL OFF
```

Messages can be sent by packet users to the internet users via the gateway. This applies to users at N6QMY as well as users at other bbs's. Begin by sending a message to IPGATE@N6QMY with the first line of the message being the letters "To:" followed by the internet address of the recipient.

```
KB6UCZ de N6QMY >
  sp ipgate@n6qmy
Enter your subject:
  Meeting?
Enter your message body:
  To: bob@hal.com
  Are you planning to attend the club meeting on Thursday? Give me
  a call. 73, Theresa
  ^Z
```

NOTE: That the recipient cannot respond to the message unless they are a ham and registered with the gateway. He/she becomes registered by sending a message from his internet host to gateway-request@lbc.com.

REMOTE USERS:

Remote users are those that do not log into N6QMY directly but merely appear from the packet world to use it as home. If a packet user checks the "White Pages" for a remote user the entry comes back as @N6QMY. The packet user then address his message to YOURCALL@N6QMY and the bbs will do the translation and forwarding to internet.

It is not necessary for a person to know your actual internet address nor use the SP IPGATE method described above. From the packet network it appears that you are just another user at N6QMY.

WHITE PAGES:

The "White Pages" is a distributed database of all the bbs users. Most bbs users in the US are represented in the database as well as many from other countries. When a user chooses a home bbs, that bbs generates an update that is sent to the regional servers and then distributed to all the other bbs's. An entry consists of; call, home bbs, first name, zip, city and state. When a user wishes to send another packet user a message he/she consults the white pages (WP) for the home bbs.

REGISTERING:

Before a user, both local and remote, can send a message from internet into the bbs system he/she must register with the gateway. This is done by sending a message from the host that he/she intends to use to gateway-request@lbc.com with the following information:

CALL:

FIRST NAME:

CITY & ST:

ZIP:

HOME BBS:

When a request is received the "From" field is copied directly into a file with the requesters call. Whenever the gateway receives a message bound for packet it scans this file comparing on the "From" field. When a match is found the gateway uses the associated call from then on. If there is no match the mailer bounces the message with a one-liner indicating the the user must register.

If you currently use another bbs as home this needs to be stated in the request. Otherwise you will be assigned N6QMY as your home. If you choose not to use N6QMY as your home you must make sure people know to send your message to YOURCALL@N6QMY.#NOCAL.CA.USA.NA to pass through the gate. Your WP entry will be wrong.

EXECUTING BBS COMMANDS REMOTELY:

Many of the commands available to local users is also available to remote users by sending a message to the bbs. Here is a subset of the commands currently available.

LIST	listing messages
LOOKUP	look up calls in the on-line callbook
WHO call	dump a users account information

READ	read messages and files
USERS n	display the last n users to connect to the bbs
INFO	display manual pages of various topics
CD	change directories in the file system
LS/DIR	display the contents of a directory
WP call	look a user up in the "White Pages"
HELP	get help on how to use a command

Not all commands available to local users can be accessed via the gate. All interactive commands are disabled as well as commands that modify the users account.

The command parser for the bbs is very powerful and the user can form very complex requests. For instance the following command is valid on the bbs:

```
LIST LAST 20 BULLETINS FROM N6QMY
LIST ALL BULLETINS ABOUT KENWOOD
```

The ABOUT keyword is used to search the subjects of messages for a given pattern, in this case KENWOOD. It can appear anywhere in the subject line.

This is an example of how complex all the commands can become. They can also be abbreviated down to the level understood by most other bbs programs. Any of the following will give the same results.

```
L< N6ZFJ
LIST FROM N6ZFJ
LIS < N6ZFJ
L FR N6ZFJ
```

In most cases a minimum number of unique characters is needed to distinguish a command.

You can get a list of commands and a translation chart from the WORLI BBS command set to the NOARY BBS command set by typing the following commands:

```
INFO COMMANDS
INFO WORLI
```

Other commands that you may wish to execute are:

```
INFO MANUAL
HELP HELP
HELP LIST
```

Now that you know what some of the commands are this is how you go about executing them. You send a message to `cmd@bbs.lbc.com` with your commands entered one per line or separated by semicolons. For example if you want to know if three of your buddies are in the white pages and if the bbs has any messages about the ICOM W2A.

Send to:

`cmd@bbs.lbc.com`

Subject: you can put anything here

`wp n0ary n6zfj n6une`

`list all about w2a`

.

The bbs will execute the commands and respond to you via return mail.

SENDING MAIL TO PACKET:

Once registered the user is free to begin using the gateway to send messages from his host through the gateway into the packet world. How much you have to specify of a users address depends on how much the bbs already knows about the user.

If the bbs knows the home bbs of the user and his home bbs is know to the N6QMY bbs, which many of them are, you simply need to supply the call of the user.

`n6oim@bbs.lbc.com`

If the N6QMY bbs doesn't know of the user but does know where his home bbs is, then you need to supply just the home bbs call in addition to the users.

`n6oim%n6iiu@bbs.lbc.com`

Notice that the call and home bbs are separated by a percent sign '%' rather than the '@' which is used in the packet domain. This is because the '@' has a meaning in the internet address.

If the N6QMY bbs has no knowledge of either the user or his home bbs, then you probably have the wrong home bbs or it is a new bbs. In which case you will have to supply the full address so the bbs will know how to route the message.

`n6oim%n6iiu.#nocal.ca.usa.na@bbs.lbc.com`

This level of addressing is hardly ever needed and normally means that the home bbs is in error.

Bulletins can be sent in a similar fashion. The address is made up of a keyword, which can be any six character word and a distribution. Distributions are local to an area. For instance SBAY is valid in northern CA, it probably has no meaning at all in Topeka, KS.

Valid distributions are:

ALLUS	*please avoid this one*
ALLUSW	all western US
ALLCA	all California, any 2 letter state should work

So if you trying to find a cw filter for a Kenwood TS440.

Send to:

want%allca@bbs.lbc.com

Subject: Kenwood TS440, CW filter

If you have one of these you are willing to part with please give me a call or leave message, thanks.

73, KB6UCZ@N6QMY.#NOCAL.CA.USA.NA

.

Be descriptive, brief, and always include your full return address in the message. Also please try to limit your distributions to small regions. Using the ALLUS distribution really slows down the flow of messages.

INFO ON THE N6QMY BBS:

The bbs came into being in April of 1993 and was the second one anywhere to run the N0ARY BBS code (the first being N0ARY himself). The bbs has 4 rf ports, 2 phone ports, the internet port, and is working on a voice synthesizer port. The latter would allow users to check for messages via DTMF from their handhelds.

The bbs itself runs on a Sun workstation under Unix. The code was written by Bob Arasmith (N0ARY) to focus on the user. Great care was taken to make the bbs very forgiving to the novice user but very flexible and powerful for the old-timer. The bbs can be configured to interact with each user differently. Some examples are:

- * List messages in either descending or ascending order.
- * Specify a list of keywords that the user wishes not to see displayed when a list is performed, similar to a kill file.

- * .signature and .vacation files.
- * Specify how many lines the users terminal is capable of displaying before scrolling, the bbs will feed info this many lines and pause allowing the user to catch up and continue or abort the operation. Similar to more.
- * Users can put commonly executed commands in keystroke macros that are accessible via a single keystroke.

A manual is currently available describing the commands and their permutations. This manual will be available later this year as a postscript file. Run the command INFO MANUAL to learn how to get one via the post office. It is not available in an ascii format.

If you have any questions about the internet gateway or the bbs in general please drop me a message.

73, -pat
 n6qmy@n6qmy.#nocal.ca.usa.na
 pat@lbc.com

 Date: 11 Aug 93 23:29:15 CDT
 From: swrinde!cs.utexas.edu!math.ohio-state.edu!howland.reston.ans.net!
 vixen.cso.uiuc.edu!newsrelay.iastate.edu!bvc.edu!madsendean@network.ucsd.edu
 Subject: Looking for the bug fix for the FBB BBS
 To: ham-digital@ucsd.edu

Can anyone tell me where I may FTP the program to fix the bug affecting the holding of messages for F6FBB's SERV.EXE? I have checked NIC.FUNET.FI as well as UCSD.EDU.

Does anyone have an idea where this patch program may be found?

73,
 Dean - KEOWO
 MADSENDEAN@BVC.EDU
 KEOWO @ KEOWO.#NWIA.IA.USA.NA

```

+++++
+          *      *  *****  *****  *          *  *****  +
+ Dean Madsen, KEOWO      *      *      *      **      *          *      *      *      +
+ Inet: madsendean@bvc.edu  *      *      *      *      *      *      *      *      *      +
+          *      *      ****  *      *      *      *      *      *      *      +

```

+ Packet: * * * ** * * * * +
+KEOWO @ KEOWO.#NWIA.IA.USA.NA* * ***** ***** * * ***** +
+++++*****+

Date: Wed, 11 Aug 1993 16:28:41 GMT
From: telesoft!garym@uunet.uu.net
Subject: Meteor scatter and Troposcatter
To: ham-digital@ucsd.edu

In <246ota\$971@jethro.Corp.Sun.COM> tjonz@caliban.Corp.Sun.COM (Todd Jonz) writes:
> > The "6M early morning crowd" has used troposcatter which is enhanced
> > by extra meteor activity to work up and down the west coast

>Troposcatter? Is this what happens when little bits of tropo re-enter the
>atmosphere? (:^). Seriously, this is a new term to me. Are troposcatter and
>tropospheric ducting related?

I'm not sure what property of the Troposphere causes troposcatter propagation but it is a weak signal mode where you get forward scattering of your signal over the horizon, giving a range of up to about 500 miles on 6m, it is usable on VHF, UHF and SHF. Troposcatter propagation is subject to fast and slow fading.

I used to maintain a tropo link as part of a military phone system. It was a wideband (100+ Khz) FM signal on 2.3 GHz and the two sites were 98 miles apart. With the high power we used and the space and polarity diversity we were able to maintain a 60 dB S/N on our voice circuits with a 99.98% reliability. With amateur requirements (much less S/N needed and narrower bandwidth) the equipment needed should be much less than what we used.

The setup consisted of two 1 Kw transmitters, each going to its own 2m dish. One was horizontally polarized, the other vertical, for polarity diversity, since fading is less likely to occur in both planes at the same time. On the receive side there were four receivers and a voting system. Two receivers were on the upper dish (about 110'), with one vertical and one horizontal, the other two receivers were on the lower dish (at about 40'), also with one vertical and one horizontally polarized. Giving space diversity and polarity diversity. Our receive signal at the input to the preamps was typically about -90 dBm and normally in the -80 to -100 dBm range, but with ducting it could get up to -20 dBm, or fading could drop it down to -120 dBm. Fast fading had a period of anywhere from 0.5 to 10 seconds with a 10-20 dB variation in the signal, slow fading occurred over hours or days.

--GaryM
--

Gary Morris KK6YB
San Diego, CA USA

Internet: garym@alsys.com
Phone: +1 619-457-2700 x128 (work)

Date: Thu, 05 Aug 1993 10:57:06 -0600
From: usc!cs.utexas.edu!oakhill!val!afarm!fredmail@network.ucsd.edu
Subject: PacketCluster in Cor
To: ham-digital@ucsd.edu

-=> Quoting Scott A Stambaugh to All <=
SAS> A friend of mine just moved to Corpus Christie, TX and is having
SAS> problems finding a DX PAcKetCluster in the area. If you know of one, or
SAS> even a BBS, please forward the freq and call to me.

I have these 3 frequencies for Packet in Corpus Christi:
145.010 - N5JKH-3
145.050 - N5IUT, TEXNET
445.100 - KB5GD, TEXLINK

Burt, N5SYY

... Vote Picard/Riker '96
___ Blue Wave/QWK v2.12

End of Ham-Digital Digest V93 #7
